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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,167	10/08/2003	Yoon-Man Choi	1572.1161	5784
21171 7590 10/11/2007 STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			EXAMINER LIANG, REGINA	
			ART UNIT 2629	PAPER NUMBER
			MAIL DATE 10/11/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/680,167

Applicant(s)

CHOI, YOON-MAN

Examiner

Regina Liang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8,11,13-16 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8,11,13-16 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) ☐ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) ☐ Notice of Informal Patent Application |
| 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) ☐ Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to amendment filed 8/31/07. Claims 1, 3-6, 8, 11, 13-16, 20 are pending in the application.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 1, 8, 11, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon (US 6,275,376) in view of Kamikakai et al (US 6,154,359 hereinafter Kamikakai).

As to claims 1, 11, Moon discloses a portable computer (Fig. 1A) having a main body (20) and a display part (40) opening-rotatable (Fig. 1A) and converting-rotatable (Figs. 1B-1D) relative to the main body (20), comprising: a screen input part provided in a screen of the display part (50); a controller (inherent the computer includes the controller) controlling the screen input part to operate when the display part is in a converting rotation zone (Fig. 1D, col. 6, lines 60-64); the converting rotation of the display part is a rotation of the display part between a position in which the screen of the display part displaying images is toward the main body and a position in which the screen of the display part is toward an opposite direction of the main body (see Figs. 1A-1D).

Moon does not disclose the computer having a position sensor detecting the rotation of the display part and a first switching part turning on/off power supplied to the body input part when the sensor detects the body input part is covered by the display part. However, Kamikakai is cited to teach a portable computer similar to Moon. Kamikakai teaches a portable computer

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having position sensor for determining the rotation of the display part relative the main body (the angles determination between the display part 3 and the main body 2 corresponds to the position sensor). Kamikakai also teaches having a switch mechanism to turning OFF power to disable the keyboard when determining the angle between the pen input part and the main body within an angular range (col. 6, lines 51-67). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the computer of Moon to have the position sensor and the first switching part as taught by Kamikakai since Kamikakai teaches this prevents erroneous manipulation of the keyboard and to prevent erroneous inputs from the keyboard when making the data input from the pen input part (col. 6, lines 63-67 of Kamikakai).

As to claims 8, 20, Kamikakai teaches turning on/off power supplied to the body input part base on the angular rotation of the display part relative to the main body, thus, Moon as modified by Kamikakai would have the controller to turn on the first switch part if the body input part is uncovered (keyboard mode as shown Fig. 1A of Moon) as claimed.

4. Claims 3, 4, 13, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon and Kamikakai applied to claims 1 and 11 above, and further in view of Kim (US 6,105,143).

As to claims 3, 13, Moon as modified by Kamikakai does not disclose the computer comprising a USB interface interconnecting the screen input part and the main body. However, Kim teaches a computer system using a USB interface (USB hub 10) for interfacing the main body and peripheral devices. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the computer of Moon as modified by Kamikakai to utilize a USB interface as taught by Kim for interfacing the screen input part and the main

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body so as to provide a computer system of power control of peripheral devices using a USB hub, which is adapted to minimize the power consumption of the display device by supplying the power to the display device through the USB hub (col. 1, lines 20-27 of Kim).

As to claims 4, 14, Kim teaches the controller controls the USB interface to operate in a power saving mode (col. 2, lines 19-54).

5. Claims 5, 6, 15, 16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon and Kamikakai applied to claims 1 and 11 above, and further in view Jeong (US 5,621,437).

As to claims 5, 6, 15, 16, Moon as modified by Kamikakai does not disclose a second switching turning on/off power supplied to the screen input part.

However, Fig. 2 of Jeong teaches a data input/output control unit having a touch panel (20) and an on/off switch (30) for controlling supplying power to the touch panel, the switch (30) is turned on the supply power to the touch panel when the touch panel is in operated, and the switch 30 is turned off when the touch panel is not operated (a power saving mode, see col. 7, lines 25-32, lines 52-56 for example). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the computer of Moon as modified by Kamikakai to have the second switching part connected between the controller and the screen input part for turning on/off power supplied to the screen input part as taught by Jeong so that power consumption can be minimized and a battery can be lengthened in life (col. 2, lines 26-30 of Jeong).

Therefore, Moon as modified by Kamikakai and Jeong would have the controller turns on the second switching part if the position sensor detects the display part is converting-rotated into

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the converting rotation zone (a pen input mode as shown in Fig. 1D of Moon) and turns off the second switching part if the position sensor detects the display part is out of converting rotation zone (a keyboard mode as shown in Fig. 1 of Kamikakai) as claimed.

Response to Arguments

4. Applicant's arguments filed 8/31/07 have been fully considered but they are not persuasive.

Applicant's remarks regarding Kamikakai on pages 5-7 are not persuasive. Fig. 1D of Moon shows a converting rotation of the display part. Fig. 8 of Kamikakai also shows the converting rotation of the display part when the angle γ is 0^0 , and Kamikakai teaches a mechanism for disabling the keyboard 6 when the angle γ is within an angular range of 0^0 to 90^0 (col. 6, lines 51-67). Thus, Kamikakai clearly teaches "a position sensor detecting a converting rotation of the display part" as is recited in claims 1 and 11.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

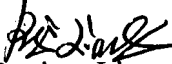
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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Liang whose telephone number is (571) 272-7693. The examiner can normally be reached on Monday-Friday from 8AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Regina Liang
Primary Examiner
Art Unit 2674

10/1/07